Notebook, PN-91-06-23.1

This pocket notebook was used by Edison in June 1891 for notes on chemicals for coating lamp filaments and clamps. The book contains 15 numbered pages, followed by 14 unnumbered pages.

Blank pages not filmed: 2-5, 10-11.

13. 4 C. 2 Trechlorophenol. Mal
14. 2 C. 1 Trichlorophenol Mal.
15 2 C 1 Trichlorophenol Chloro.
16 2 C ½ gram Cam chloro.
17 2 C 1 gram Cam Chloro
18 2 C 2 gram Cam Chloro
19 3 C Chloro only —
20 2 C 1 gram Thymol. Chloro
21 2 C. 1 gram Menthol. Chloro .005
22 2 C 1 gram Menthol " .005
23 2 C Cam 2 drops Dipi — Chloro.
24 2 C 1 Cam 5 drops Dipi Chloro.
25 2 C 1300 Milgma. Cam
26 2 C 1 gram Cam 10 drops dipi Chloro
27 2 C 250 milgma sulphur Chloro — NG-Tol.
32 2 C 1 gram Cam 5 drops dipi 300 mg Phenol Chloro
32½ 1 C ½ C Cam 1 gm Ephedr 10 dipi chloro
33 2 C solution of Antiseptic in chloro 4 Div Dropper M.
45 2 C 1 gram Betol. Chloro
51½ 2 1 gram Tetling Mal. 1 gm Cam 5 dipi. Mal.
53 Same as 26 .005 dis.
56 2 C 40 dipi 2 divisions Chloro
2 Sanitoxin Chloro
54 2 C 300 Milgm Cam 40 dipi
2 C 200 " "
58 2 C 300 20 dipi
61 2 C 300 Chally — Chloro
62 about 2 C chloro 30 dipi 300 mg ½ gm Japan wax
63 2 C 1 Cam 6 dipi poured in glass .005?
64 2 C 1 - 5 - phenol chlo. Thickened. Mucilaginous Spatula in glass. Plugged Wet. .003 dis

Camphor Melted, dissolves C perceptibly. very sublimbl.
dont crystl, gives when thin glassy coat.

Chlthy – Dont appear sublime, dissolves perceptibly. on
Cooling dont give fibre – when thick off crystals –
but often a white when spread out thin, sticky – viscous –
good dissolver – ?

Anthracene Seems to dissolve some C – more sublimeable
than Com – leaves sometimes very thin coat Cbt –

Chloroacetylat Low MP – dont sublime – good solvent C –
Crystl after cool. no fibre –

Chloranil High MP, exceedingly sublimeable, scarcely
able melt it so sublimbl – dissolves C perfectly – black
shiny scale – hard – thin wooll seem perfectly –

Benzanilid Melt mod easy – sparingly sublimbl –
dissolves a little C – Crystl shiny on cooling – no fibre

Dibromanthracene High MP – sto sligh dissolving,
slightly Crystl on cooling –

Nitrobenzophenone (Meta) – Low MP – not sublimeable –
good solvent when very liquid – but – after pouring on
butter dish a while, nearly cool, it becomes hot, [illegible]
[illegible] with pimpe d'[illegible] to numerous fibrils, [illegible]

Sulpho Carbanilid not sublimbl. Med high MP –
good elegant solvent – dries to perfect shine – viscous.
Dont crystl fibre –

Anthrachinon Sublimes very much before melting but [illegible]
at very high temp, seems to have no solid action, Cbt [illegible]
Brilliant if by thickening the C – no fibre –

Terpinhydrate 1/2 to 1% as substitute for Camphor
Melting high MP — perfect solvent, gives beautiful
shine — after cooling crystals dull color — probably because
there is an excess of Hydrate — this may be as good as Cam.

Betol (Naphtalol) MP. moderate — perfect solvent
dont appear crystallize after cooling — dont sublime

Naphtolamin MP low — very oily — slowly sublimable
appears to dissolve C good — after cooling solution thin and shiny
stiff, curious — after long while boxes shine — antiseptics

Dioxoxin Very high MP shiny green white powder, is
not irritating stuff. Very little liquid obtained 55% acid
melt sublimes slowly, scarcely dissolve any C
C is partly decomposed by high temp — this is unusual
suit for exposing high temp

Aloin — nq — sticky — pulls out in threads.

Diphenylamin — Fair dissolve, on cooling antiseptics
sublimes slightly —

Quinin Sulphate insolubles — nq —

Carbaglf MP high — sublimes before melting seems
to dissolve C — slightly — Very sublimable.

Thymol MP low very oily — sublimable, extra good
solvent — thick after cooling — small quantity was great comp —
when again thrown in C spread and dissolve without stirring not viscous.

Menthol MP low — very fine — not so good solvent as Thymol
hard to be stirred well, not very sublimable

Hydrochinon MP high seems to have water, crystallizes
quick, dissolves same C — sublimes quite rapidly —
not viscously when poured, surface not shiny dont
stick —

(9)

Ammonium Formiat nq —

Ammonium Sulphocyanate nq —

Acid Phtalic sublimes readily seems to dissolve fairly
used high MP thick quick — crystallizes slightly —

Phenolphtalein Exceedingly high MP —
dont appear dissolve any — dub sublimable.

Camphor monobromat. low MP — pretty good solvent
not sublimable —

Amilis Chloral High MP — difficult getting
liquid — sublimes readily —

Quinidine — Very high MP — Semi-dissolves C —
at very higher temp — not sublimable —

Methyl oxide oxalic Mod MP — acts quiet
dont appear dissolve in liquid — yet it melts + globulates
drawn into thread, dipped thread I mean like melting

Turpentine oil Orthodichlorbenzol — low MP. dont appear
to dissolve only trace —

Monochlorohydrate T Oil — same as above.

Phenacetine mid low MP — dissolves C
somewhat — Crystallizes —

Oxamide — Dont Melt — even on platine in flame
silently sublimes without tinge —

Trichlorophenol — low MP — fair solvent
cools instantly — sublimables

77 - 71 - 79 - 80 -

For painting clamps -

Aluminum trihydrate — Resinate Iron Asphaltum Solvent.
Acetate Alumina — Chloride Calcium — Amorph Silica
Fluorspar — Ox Chl Magnesia Ox Chl Zinc —
Ammonia Citrate Iron — Sulfate soda, Japan Varnish
Plastic Paint — Asphaltum Oil in dipt Leather —
Asphaltum Chloroform Stuff — Fallowy Leaf, paint all
over a wts part carbon —

Solvit Cbt — June 23 91 — 100 cc 100 cc H_2O —
4 days — afterwards treated water 3 times 3 days —
filtered each time 7/10 of large jar 7 gals about.
Last filtering put whole in strong Hot-bot, thrown in
water tried & filtered — then precipitated in
Cobaltate Mod — did not get off ppt perfectly.
stiff mostly 150 mesh well ground and re-mell —
+ Camphor mixture Best Solute — 1st Dips —
Chfrm — Benzol — Ether later something dirty

New Reg. 100 cc 24 mel and 12 grms to each 100 cc x 100 cc
Best Richard dipi – 2nd chloro – 3rd Benzol – 4th Ether = Benzol stuff dirt p-ff
White 10 CH p of ont. Greenish O Naptha O
when ground up fine White takes out
Cross Scratches – hot Mel dissolves quantity
HCl hot slowly takes out considerable
white stuff – still leaves large quantity
red ash pdy = Silicate from or some
Silicate.

Reg io. 100 cc acid 100 cc HO –
5 days 3 days 3 soakings large Silk
HO – filtered, washed strong HCl,
washed 2 days by 2 soakings filtered
Brio) 1st ground fine washed hot
well – 13 each 100 cc x 100 cc mel
24 grms Br shake use Ether or
Absolute Mel OK=

Solvents Obt.–

Benzonitrile good

Isobutylchloroform good – volatile most

Methylbutyl –

Methylchlorosulphide good dent trap.

Aldehyde of Zimtsäure good "

Kresol from Theerol – " "

Toluidin Meta good not so volatile with the

Picoline same as pyridin

Aniline Nitric - Black sub -
Nitrosodimethylin partial Solvent.
very anxious - brittle dough.
Pyridin - good - viscous, must be dried
out - gradually & puffs through Carbon below
steam.
Aniline oil about same as pyridin but
not as pliable or quite as wet -
Viscous - puffs - Carbon hard - might
act on fil with Dilute or dry
SO_4 to solidify aniline.
Chinolin by grades - gluten makes
Viscous but puffs H and C.
Dichlorometa acid - good stiff &
Viscous - puffs C hard but coal fire
much.
Acethylamine - Rapid Solvent Chem
active, viscous dried hot.

Bass

No 1 Lime strongly oxd 3d
not sticky mal —

No 2 schotts Anil nitric
purified mal —

No 3 photo phyo

No 4 Lime not oxd 3 too much
sticky bep mal

No 5 Anil nitric by myself
purified mal —

No 6 pp from Boyd sid for Cole
7 — patch —

No 7 Kens Lamp Lampblack

No 10 Hcl Kclo analine
green stuff — purified mal

No 11 Same as No 10 not purified
mal —

No 12 same as 10 not well
washed afterwards purified mal

No 13 Highly oxd 3d Lime

No 20 Hcl Kclo. Analine
made well —

21 Cantar. only Nerd water
wash only

No 22 Acline Nerd on Turpeth

23 Nerd on tann Lunacid

24 Cord Tan Potash bengal.
Plum n pp from Bengal —

25 part of 24 not dis bengal

26 Syma Nerd —

bal amb —

36 old Cambay, dis. in
10 ops & dried

38 Syma on chl Sulph

27 amb with fuchsine
28 " " safranine
29 " qrum methyl

33 Amido

30 Acid green Brilliant
31 Hoffman Violet
32 Rosanilin Acetic
~~[illegible]~~ Cryoilline
34 Piperonic acid
35 Quinidine Sulphate
36 old Sample Cobalt, dreindeps
37 Rosanilin Hydrochloride
38 Syn dis benzol thio Chlsulph
25X Extra benzoling of No 25

42 2000 water 100 cc
Rooney 400 cc Hcl
50 Chlor 200 mg N
150 deg fahr 40 minutes

142 Schultz carbonit dipi — rough —
3 Bulphumuric, No 10 dipi
4 No 2 No 10 dipi
5 No 10 dipi only
6 No 11 dipi
7 photographica — No 2 dipi
8 Dipi — Carbonite,
9 Carbonite — dipi No 10
10 No 11 No 1 + dipi
11 same as 10 but bath diluted
12 2500 No 20 500 No 5
13 Electrigraphic No 13. dipi
14 Kero smut 2500 No 13 1000 dipi
15 5c smut 2500 1000 No 13.
16 2500 5c smut 1500 No 13
17 2500 " 2000 No 13
18 2500 " 1000 No 22
19 not test
20 2500 Etna smut 1000 No 5
21 2000 " 2000 No 13
22 200 " 2000 No 5
23 1500 " 2000 No 5
24 2000 " 2000 No 21

25 2000 Ether amit 2000 Carbonate
26 same except only little dipi'rchlor.
27 1500 Ethersmit 2000 Carbonate
28 1000 " 2000 "
29 1500 No 10 2000 "
30 2000 No 10 1500 No 13
31 2000 No 10 1500 No 21
32 1500 No 10 2000 No 21
33 3000 No 21 nq
34 ——— nil
35 6000 phq Oxno Elec 2000 Carbon
36 2000 " " 750 No 13
37 2000 Ether amit 2000 Rosanilin Hcl
38 2000 ~~XXXX~~ Rosanilin Hcl, 1000 No 5
39 ~~4000 No 25~~ ———
40 2000 No 25 1000 Ethersmit
41 4000 Carbonate.
42 2000 Ethersmit 2000 No 33
~~[illegible]~~
44 2000 Carbonate 2000 No 37
45 2000 Ethersmit 2000 No 27

46 2000 No 20 2000 No 27
47 2000 No 31 2000 Ether not,
48 2000 No 31 2000 No 20
49 4000 No 29 2000 Ether not,
50 No test –
51 4000 No 37 –
52 2000 Ether not 2000 No 4
53 2000 " 2000 Carbonate ? X
54 2000 " 2000 No 25 ? X
55 2000 " 2000 No 27
56 no test
57 2000 " 2000 Rosanline Hcl
58 No test,
59 2000 Ether not 2000 No 5
60 } no test,
61
62 2000 Ether not 2000 Carcinoma
63 4000 Cbt mal 20 drops d.
64 " " Chloroform only
65 " " 20 drops 900 butt in
Chloro - 1/4 of cbt ether not separated
65 4000 Cbt - 900 but - forgot Rosolic

66 4000 Cht. 40 Dsobut in Ether

67 " " Chloro. Coal Jardinly

67 " " Coal Tar dis benzol pouns d'ni

68 4000 No 25 Chloro

69 No 20 + Dsobut

70 3000 No 20 60 dips Dsobut

71 " " Chloro 20 Dso 20 dips

72 Cht 3000 Cht 20 Dso 15 dips

73 4000 Cht 15 Dso 15 00 Ether

74 " 7 dips Ether

75 No test

76 "

77 4000 Cht. Chl Hy

78 " 500 mg Chl Hy Ether

79 " 12 dips Meta Kresol Ether

80 " 12 " Ortho Kresol - Ether

81 " 500 Bromo Hy Ether No test

82 " " "

83 4000 Cht 300 Dsobut Ether

84 no test

85 " "

86 Blood Meal 30 dips

87 3000 Cht. 750 Chl Hy Ether

88 " 20 dips 50 mg Chl Hy with heat.

89 90 3000 Cht 20 dips Ol + Mg

92 2000 No 33 2000 No 20 Reduced 20 by ammonia mal dis 33 dips - powder

93 same as 92 less chloroform

94 2000 old 20 2000 33 in dips powder

94 Ether ~~No 20~~ duplicate but No 20 made different

95 2000 33 1000 No 20 dips powder

96 2000 33 2000 20
dipi powder

97 2000 No 33 2000 20 dipi
powder

98 2660 No 20 1330 No 33
dipi ungt.

99 2000 20 2000 33
Chloroform only 1 in 33.

100 Dup. 43 pellicul, ungt

101 2500 33 2000 20
dipi - pellicul.

102 2000 20 2000 33
Benzaldehyde ungt.

103+104 3000 33 2000 20
dipi - pellicul. ungt.

104 2666 No 20 1333 33
dipi - pellicul, ungt

105 3000 33 1000 20
dipi - pellicul, ungt

106 2000 27 2000 20
100 drps dipi - 20 Isobut ungt

107 2000 20 1500 33
30 drops anthracoil powder ~~ungt~~

108 2000 27 2000 20
100 drops benzene 10 dpi pellicul

109 4000 Carbonate 5 dpi pellicul
powder

110 2000 20 2000 Carbonate
dipi pellicul ungt

111 2000 33 2000 Carbonate
dipi pellicul, ungt.

112 miss.

113 2500 33 2000 20
dipi ungt

114 4000 Cbt 6 drops Oil Kerosene
powder